

What is claimed is:

1. An apparatus for moveably supporting a workpiece above a support surface, comprising:

a primary support adapted to engage the support surface;

5 a secondary support moveably coupled to the primary support, the secondary support including a cradle member adapted to engage the workpiece;

a drive assembly operatively coupled to the secondary support and adapted to move the secondary support relative to the primary support in at least one of a first direction away from the support surface and in a second direction toward the support surface; and

10 a control device remotely positionable with respect to the drive assembly and operatively coupled to the drive assembly, the control device being adapted to transmit at least one of a first control signal to the drive assembly to move the secondary support in the first direction and a second control signal to the drive assembly to move the secondary support in the second direction.

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2. The apparatus according to Claim 1 wherein the primary support comprises a cylindrical support having a base coupled to a first end thereof, the base being adapted to engage the support surface.

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3. The apparatus according to Claim 1 wherein the cradle portion includes a laterally-extending receiving member and a pair of side members coupled to the receiving member, the side members projecting away from the receiving member, the receiving member and the side members defining a receiving area adapted to receive and support at least a portion of the workpiece.

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4. The apparatus according to Claim 1 wherein the cradle portion includes a first laterally-extending receiving member, a first side member coupled to the first receiving member and projecting upwardly therefrom, a second side member coupled to the first receiving member and projecting downwardly therefrom, a second laterally-extending

receiving member coupled to the second side member, and a third side member coupled to the second receiving member and projecting upwardly therefrom, the first receiving member and the first side member defining a first receiving area and the second receiving member, and the second and third side members defining a second receiving area.

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5. The apparatus according to Claim 1 wherein the cradle portion includes a receiving surface defining at least one receiving area, the receiving surface being adapted to engage and support at least a portion of the workpiece.

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6. The apparatus according to Claim 5 wherein the receiving surface includes a plurality of ball bearings at least partially disposed therein.

7. The apparatus according to Claim 5 wherein the receiving surface includes a plurality of roller bearings at least partially disposed therein.

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8. The apparatus according to Claim 1 wherein the drive assembly comprises an electric motor.

9. The apparatus according to Claim 1 wherein the secondary support includes a threaded portion and the drive assembly includes a threaded shaft engaged with the threaded portion, the electric motor being operatively coupled to the threaded shaft.

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10. The apparatus according to Claim 1 wherein the drive assembly includes a pressurizeable portion.

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11. The apparatus according to Claim 10 wherein the drive assembly includes a valve assembly operatively coupled to the pressurizeable portion and adapted to provide a flow of a pressurized fluid to the pressurizeable portion in response to a first control signal.

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12. The apparatus according to Claim 10 wherein the drive assembly further includes:
a brake assembly operatively coupled to the primary support and to the secondary support; and

5 a valve assembly operatively coupled to the pressurizeable portion and to the brake assembly, the valve assembly being adapted to provide a flow of a pressurized fluid to the pressurizeable portion in response to a first control signal.

13. The apparatus according to Claim 12 wherein the valve assembly is further adapted to provide a second flow of the pressurized fluid to the brake assembly in response to the first
10 control signal.

14. The apparatus according to Claim 13 wherein the valve assembly is further adapted to desist the first and second flows of the pressurized fluid to the pressurizeable portion and to the brake assembly, respectively, in response to a second control signal.

15 15. The apparatus according to Claim 12 wherein the brake assembly includes a plurality of clamping members, and wherein the second flow of the pressurized fluid causes the clamping members to disengage from the secondary support.

20 16. The apparatus according to Claim 1 wherein the control device includes a transmitter and the drive assembly includes a receiver, the transmitter being adapted to transmit at least one of an electromagnetic control signal and an acoustic control signal to the drive assembly and the receiver being adapted to receive the at least one control signal.

25 17. A method of performing a manufacturing operation on a workpiece, comprising:
manually supporting a first end portion of the workpiece above a support surface;
providing a support apparatus engaged with a second end portion of the workpiece, the second end portion being spaced apart from the first end portion, the support apparatus including a primary support engaged with the support surface, a secondary support

moveably coupled to the primary support and engaged with the second end portion of the workpiece, and a drive assembly operatively coupled to the secondary support; and

controllably adjusting a position of the second end portion of the workpiece by actuating the drive assembly to adjust the secondary support relative to the primary support.

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18. The method according to Claim 17 wherein providing a support apparatus having a secondary support comprises providing a support apparatus having a secondary support that includes a laterally-extending receiving member and a pair of side members coupled to the receiving member, the side members projecting away from the receiving member, the
10 receiving member and the side members defining a receiving area adapted to receive and support at least a portion of the workpiece.

19. The method according to Claim 17 wherein providing a support apparatus having a secondary support comprises providing a support apparatus having a secondary support that
15 includes a first laterally-extending receiving member, a first side member coupled to the first receiving member and projecting upwardly therefrom, a second side member coupled to the first receiving member and projecting downwardly therefrom, a second laterally-extending receiving member coupled to the second side member, and a third side member coupled to the second receiving member and projecting upwardly therefrom, the first receiving member
20 and the first side member defining a first receiving area and the second receiving member, and the second and third side members defining a second receiving area.

20. The method according to Claim 17 wherein providing a support apparatus having a secondary support comprises providing a support apparatus having a secondary support that
25 includes a cradle portion, the cradle portion having a receiving surface defining at least one receiving area and having a plurality of ball bearings at least partially disposed therein.

21. The method according to Claim 17 wherein providing a support apparatus having a secondary support comprises providing a support apparatus having a secondary support that

includes a cradle portion, the cradle portion having a receiving surface defining at least one receiving area and having a plurality of roller bearings at least partially disposed therein.

22. The method according to Claim 17 wherein controllably adjusting a position of the
5 second end portion of the workpiece includes controllably actuating an electric motor.

23. The method according to Claim 17 wherein controllably actuating an electric motor includes transmitting a first control signal along a first control cable.

10 24. The method according to Claim 17 wherein controllably actuating an electric motor includes transmitting at least one of an electromagnetic signal and an acoustic signal to the drive assembly.

25. The method according to Claim 17 wherein controllably adjusting a position of the
15 second end portion of the workpiece includes controllably rotating a threaded shaft engaged with a threaded portion of the secondary support.

26. The method according to Claim 17 wherein controllably adjusting a position of the
20 second end portion of the workpiece includes providing a flow of pressurized fluid to a pressurizeable portion of the drive assembly.

27. The method according to Claim 17 wherein controllably adjusting a position of the
second end portion of the workpiece includes providing a first flow of pressurized fluid to a
pressurizeable portion of the drive assembly, and providing a second flow of pressurized
25 fluid to a brake assembly.